

EXPOSED: Insulate yourself from heat loss during exercise

The biggest concern for exercising in the cold is hypothermia, or too much heat loss. When you exercise in a cold environment you must consider one primary factor: how much heat will your body lose during exercise?

Heat loss is controlled in two ways:

1. Insulation - body fat plus clothing; and
2. Environmental factors - temperature, wind and whether you're exercising in the air or in the water. Each of these factors plays a role in the body's ability to maintain a comfortable temperature during exercise.

Insulation

Although many people aspire to have a lean figure, people with a little more body fat are better insulated and will lose less heat. Clothing adds to the insulation barrier and is clearly the most important element in performance and comfort while exercising in the cold. One study showed that heat loss from the head alone was about 50 percent at the freezing mark, and by simply wearing a helmet, subjects were able to stay outside indefinitely.

Clothing is generally a good insulator because it has the ability to trap air, a poor conductor of heat. If the air trapped by the clothing cannot conduct the heat away from the body, temperature will be

maintained.

Unlike air, water is a rapid conductor of heat. Even in the coldest of temperatures, people will sweat and risk significant heat loss. With this in mind you want to choose clothing that can trap air but allow sweat to pass through. By wearing clothing in layers, you have the ability to change the amount of insulation that is needed. Many new products can provide such a layered barrier; however, it is important to avoid heavy cotton sweats or tightly woven material that will absorb and maintain water. These materials cannot provide a layer of dry air near the skin.

Keeping the hands and feet warm is a common concern when exercising in the cold. Lower temperatures cause blood to be shunted away from the hands and feet to the center of the body to keep the internal organs warm and protected. Superficial warming of the hands will return blood flow to prevent tissue damage. Blood flow will not return to the feet unless the temperature of the torso is normal or slightly higher (.5-1.0° F above normal). So, to keep your feet warm you must also keep the rest of your body warm at all times.

Check with the weatherman

Air temperature and wind chill factor should always be checked prior to exercising in the cold.

Data from the National Safety Council suggest little danger to individuals with properly clothed skin exposed at 20° F, even with a 30 mph wind. A danger does exist for individuals with exposed skin when the wind chill factor (combined effect of temperature and wind) exceeds minus 20° F. That can be achieved by any combination of temperatures below 20° F with a wind of 40 mph and temperatures below minus 20° F with no wind. If you are exercising near the danger zone for skin exposure, it also is advisable to warm the air being inhaled by wearing a scarf or mask over your nose and mouth.

Rules For Exercising In The Cold

1. Check the temperature and wind conditions before you go out.
 2. Keep your head, hands and feet warm.
 3. Dress in layers that can provide a trapped layer of dry air near the skin (avoid cotton sweats and other similar materials).
 4. Warm the air you are breathing if temperatures are below your comfort level (usually around zero degrees F).
- (Courtesy of the American Council on Exercise, a nonprofit organization dedicated to promoting the benefits of physical activity and protecting consumers from unsafe fitness products and instruction.)*

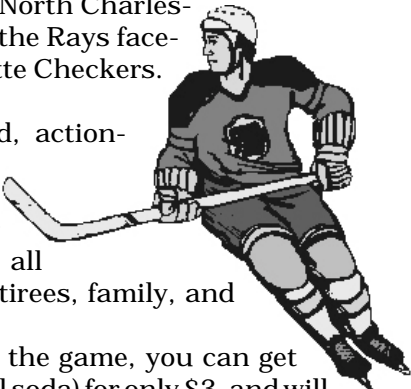
Celebrate Armed Forces Night with South Carolina Stingrays Feb. 11

The South Carolina Stingrays will honor the armed forces this season with their annual Armed Forces Night at the North Charleston Coliseum. This year's game is Feb. 11 as the Rays face-off against the rivals to the north, the Charlotte Checkers. Game time is set for 7:30 p.m.

Come on out for an evening of fun-filled, action-packed hockey excitement with the South Carolina Stingrays. Tickets are available for only \$6 (regular price \$9) at the Outdoor Recreation Center. Tickets are available to all active duty military personnel, reservists, retirees, family, and friends at this discounted price.

By showing your military identification at the game, you can get an Armed Forces Value Meal (hotdog and small soda) for only \$3, and will receive 10 percent off all Stingrays merchandise \$5 and up.

You must purchase your tickets through the Outdoor Recreation Center before Feb. 6. This will be the only way to purchase discounted tickets for this game.



Intramural sports standings

Basketball		W	L			
1	SFS	10	0	4.	1 CTCS	7 5
2	Flyers	8	0	5.	437 AW	5 4
3	SUP 1	8	0	6.	CS	5 4
4	MEDGP	8	1	7.	CRS	5 4
5	CRS	6	2	8.	EMS	4 5
6.	SUP 2	7	3	9.	APS	3 6
7.	437 AGS 1	6	3	10.	SUP	3 9
8.	EMS	3	3	11.	CES	2 7
9.	CES	3	3	12.	437 AGS 2	1 11
10.	437 AGS 3	2	3			
11.	1 CTCS	3	5	Bowling		
12.	APS 1	3	6	National League		
13.	LSS/CPTS	2	4	1.	CES	
14.	LGT	2	6	2.	APS 1	
15.	APS 2	2	7	3.	637 AGS 1	
16.	Navy Hosp.	1	6	4.	EMS 2	
17.	437 AW	1	7	5.	Det. 3	
18.	437 AGS 2	1	8	6.	LSS	
				7.	Comm	
				8.	15 AS	
Racquetball				9.	MSS	
1.	SFS	11	1	10.	EMS 3	
2.	373 TRS	9	3	11.	CRS	
3.	437 AGS 1	8	4	12.	Blind team	



In the thick of things
Noah Murray of the 437 Security Forces Squadron attempts a layup during a recent game against 437 Trans. The SFS team is currently leading the intramural basketball league with a 10-0 record.

Staff Sgt. Andrew Rodier